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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	SEP 09	CA/CAplus records now contain indexing from 1907 to the present
NEWS 4	DEC 08	INPADOC: Legal Status data reloaded
NEWS 5	SEP 29	DISSABS now available on STN
NEWS 6	OCT 10	PCTFULL: Two new display fields added
NEWS 7	OCT 21	BIOSIS file reloaded and enhanced
NEWS 8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9	NOV 24	MSDS-CCOHS file reloaded
NEWS 10	DEC 08	CABA reloaded with left truncation
NEWS 11	DEC 08	IMS file names changed
NEWS 12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14	DEC 17	DGENE: Two new display fields added
NEWS 15	DEC 18	BIOTECHNO no longer updated
NEWS 16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS 17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS 18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19	DEC 22	ABI-INFORM now available on STN
NEWS 20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAplus

NEWS EXPRESS	DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:37:01 ON 30 JAN 2004

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 16:37:15 ON 30 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 JAN 2004 HIGHEST RN 643723-14-2
DICTIONARY FILE UPDATES: 29 JAN 2004 HIGHEST RN 643723-14-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

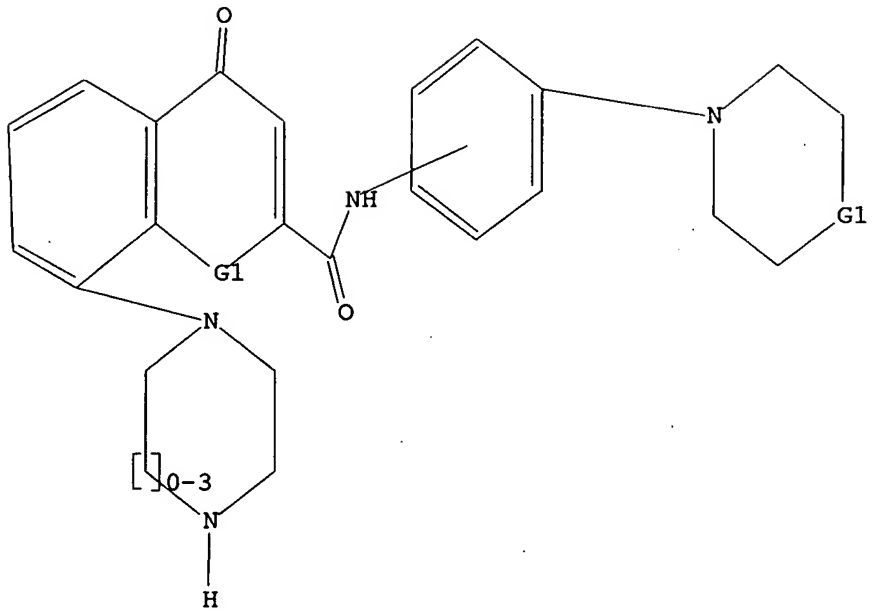
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading 10051776.5

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 O,S,N,NH

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full
FULL SEARCH INITIATED 16:37:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 97 TO ITERATE

100.0% PROCESSED 97 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

L2 4 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'CAOLD' ENTERED AT 16:37:51 ON 30 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGlstRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s l1 sss full
REGlstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 16:37:59 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 97 TO ITERATE

100.0% PROCESSED 97 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

L3 4 SEA SSS FUL L1

L4 0 L3

=> file marpat
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.42 311.89

FILE 'MARPAT' ENTERED AT 16:38:09 ON 30 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 140 ISS04)(20040123ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6667161 23 DEC 2003
DE 10317295 24 DEC 2003
EP 1371658 17 DEC 2003
JP 2003346928 05 DEC 2003
WO 2004000750 31 DEC 2003

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s l1 sss full
FULL SEARCH INITIATED 16:38:16 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED - 5317 TO ITERATE

81.8% PROCESSED 4350 ITERATIONS 3 ANSWERS

97.7% PROCESSED 5197 ITERATIONS 3 ANSWERS

100.0% PROCESSED 5317 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.52

L5 3 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 109.84 421.73

FILE 'CAPLUS' ENTERED AT 16:39:18 ON 30 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 30 Jan 2004 VOL 140 ISS 6
FILE LAST UPDATED: 29 Jan 2004 (20040129/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L6 5 L3

=> s l5
L7 3 L5

=> d l6 fbib hitstr abs total

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356424 CAPLUS
DN 138:368765
TI Preparation of 4-oxo-4H-chromene-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2003037872	A1	20030508	WO 2002-SE1989	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3649 A 20011101

OS MARPAT 138:368765

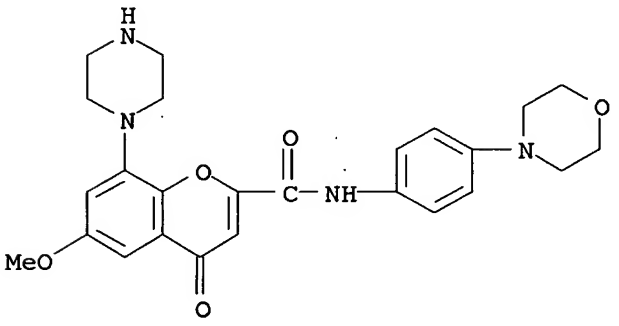
IT **442549-12-4P 521094-04-2P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(5-HT antagonist; prepn. of chromenones and quinolinones as 5-HT1B and 5-HT1D antagonists for treatment of psychiatric disorders)

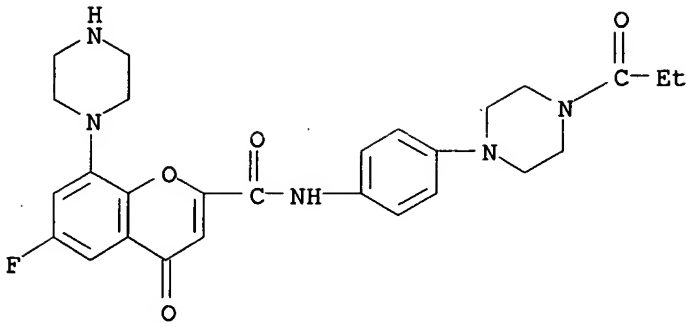
RN 442549-12-4 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, 6-methoxy-N-[4-(4-morpholinyl)phenyl]-4-oxo-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)



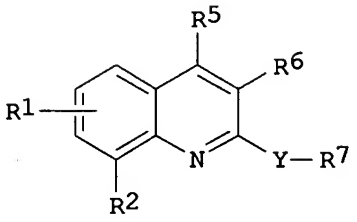
RN 521094-04-2 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, 6-fluoro-4-oxo-N-[4-[4-(1-oxopropyl)-1-piperazinyl]phenyl]-8-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

GI



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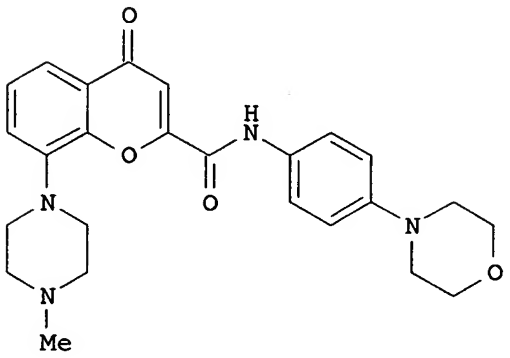


II

AB Quinolines I [wherein R1 = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as

5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-chromene-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-chromene-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN 138:368764
TI Preparation of 4-oxo-4H-chromene-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

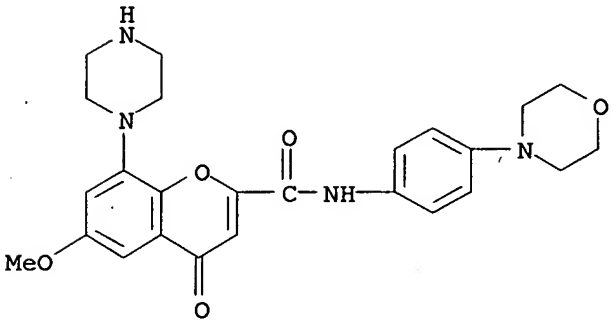
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

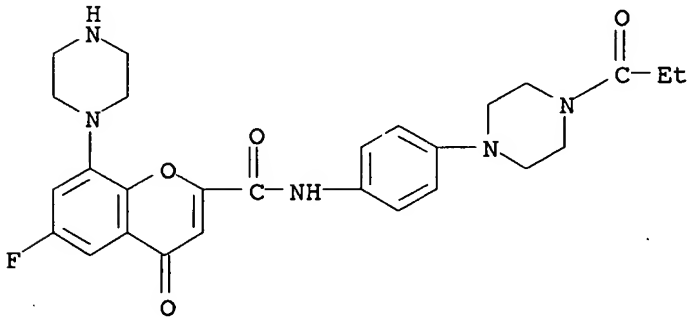
OS MARPAT 138:368764
IT **442549-12-4P**, 6-Methoxy-4-oxo-8-(piperazin-1-yl)-4H-chromene-2-carboxylic acid [4-(morpholin-4-yl)phenyl]amide **521094-04-2P**, 6-Fluoro-4-oxo-8-piperazin-1-yl-4H-chromene-2-carboxylic acid

[4-(morpholin-4-yl)phenyl]amide monohydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(5-HT antagonist; prepn. of chromenones and quinolinones as 5-HT1B and 5-HT1D antagonists for treatment of psychiatric disorders)

RN 442549-12-4 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-methoxy-N-[4-(4-morpholinyl)phenyl]-4-oxo-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

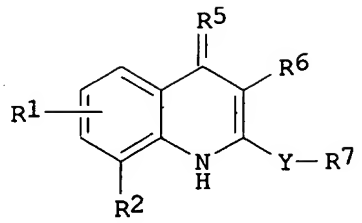


RN 521094-04-2 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-fluoro-4-oxo-N-[4-[4-(1-oxopropyl)-1-piperazinyl]phenyl]-8-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

GI



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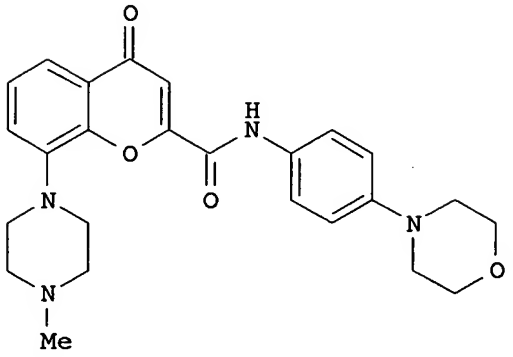

II

AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-chromene-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539473 CAPLUS
DN 137:109293
TI Preparation of piperazinylchromans as 5-HT1B and 5-HT1D agonists/antagonists useful as antimigraine drugs.
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055014	A2	20020718	WO 2002-SE70	20020115
WO 2002055014	A3	20021114		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			US 2001-262108PP	20010116
			SE 2001-3646 A	20011101
EP 1353915	A2	20031022	EP 2002-715919	20020115
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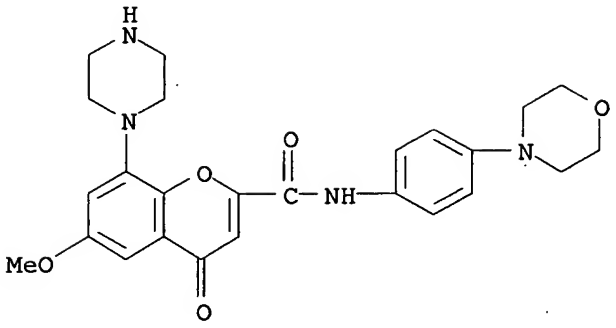
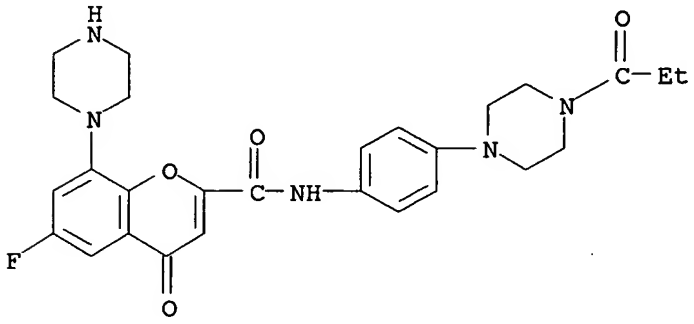
			US 2001-262108PP	20010116
			SE 2001-3646 A	20011101
			WO 2002-SE70 W	20020115
NO 2003003205	A	20030902	NO 2003-3205	20030715
			US 2001-262108PP	20010116
			SE 2001-3646 A	20011101
			WO 2002-SE70 W	20020115

OS MARPAT 137:109293
IT **442549-12-4P 442549-28-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperazinylchromans as 5-HT1B and 5-HT1D agonists/antagonists useful as antimigraine drugs)
RN 442549-12-4 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-methoxy-N-[4-(4-morpholinyl)phenyl]-4-oxo-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 442549-28-2 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-fluoro-4-oxo-N-[4-[4-(1-oxopropyl)-1-piperazinyl]phenyl]-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)



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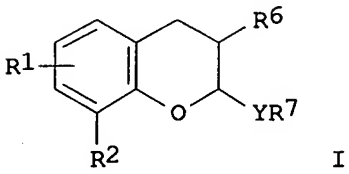


I

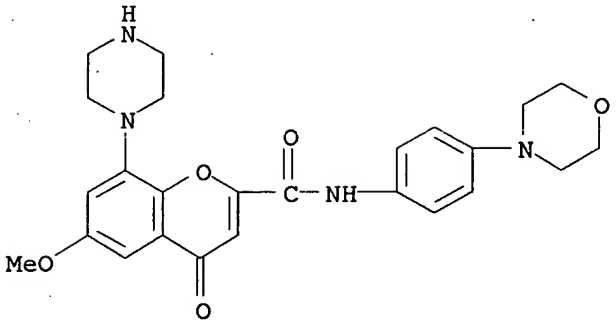
AB Title compds. [I; R1 = H, thiomethoxy, NHA, NA2, NHCOA, halo, OH, OA, cyano, aryl, (substituted) alkyl, cycloalkyl, etc.; A = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R2 = (substituted) piperazinyl, homopiperazinyl, aminoalkylamino, aminoheterocyclyl, heterocyclylamino; R6 = H, Me; Y = CONH, CONA, CSNH, CH2CO, CH2NA, piperazinylcarbonyl, 5-membered heterocyclylene, etc.; R7 = (substituted) mono- or bicyclic aryl, heterocyclyl], were prepd. Thus, 8-(4-methyl-1-piperazinyl)chroman-2-carboxylic acid hydrochloride (prepn. given) in DMF was treated sequentially with 1-hydroxybenzotriazole, O-(1H-benzotriazol-1-yl)-N,N,N',N'-pentamethyleneuronium tetrafluoroborate, Et3N, and 4-(4-morpholinyl)aniline (prepn. given) followed by stirring overnight to give 8-(4-methyl-1-piperazinyl)chroman-2-carboxylic acid (4-morpholin-4-ylphenyl)amide. Several I showed 5-HT1B antagonist activity in the range 0.006-5.5 mg/kg in a screen for reversal of

hypothermia in guinea pigs.

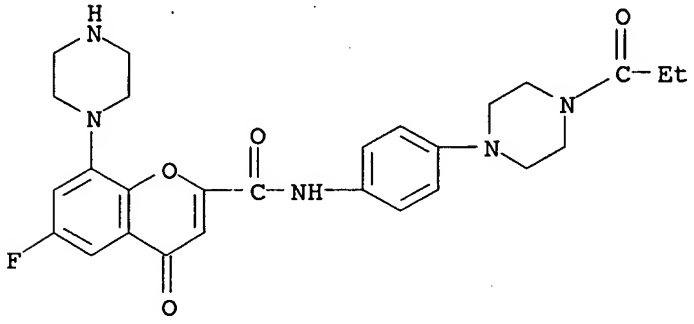
L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539472 CAPLUS
DN 137:93772
TI Preparation of piperazinylchromenones as 5-HT1B 5-HT1D agonists/antagonists useful as drugs.
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055013	A2	20020718	WO 2002-SE69	20020115
WO 2002055013	A3	20021114		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			US 2001-262109PP	20010116
			SE 2001-3647 A	20011101
EP 1353914	A2	20031022	EP 2002-729623	20020115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			US 2001-262109PP	20010116
			SE 2001-3647 A	20011101
			WO 2002-SE69 W	20020115
NO 2003003204	A	20030902	NO 2003-3204	20030715
			US 2001-262109PP	20010116
			SE 2001-3647 A	20011101
			WO 2002-SE69 W	20020115

OS MARPAT 137:93772
IT **442549-12-4P 442549-28-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of piperazinylchromenones as 5-HT1B 5-HT1D agonists/antagonists useful as drugs)
RN 442549-12-4 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-methoxy-N-[4-(4-morpholinyl)phenyl]-4-oxo-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 442549-28-2 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-fluoro-4-oxo-N-[4-[4-(1-oxopropyl)-1-piperazinyl]phenyl]-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)



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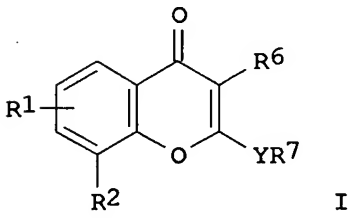

I

AB Title compds. [I; R1 = H, thiomethoxy, NHA, NA2, NHCOA, halo, OH, OA, cyano, aryl, (substituted) alkyl, cycloalkyl, etc.; A = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R2 = (substituted) piperazinyl, homopiperazinyl, aminoalkylamino, aminoheterocyclyl, heterocyclylamino; R6 = H, Me; Y = CONH, CONA, CSNH, CH2CO, CH2NA, piperazinylcarbonyl, 5-membered heterocyclylene, etc.; R7 = (substituted) mono- or bicyclic aryl, heterocyclyl], were prepd. Thus, 8-(4-methyl-1-piperazin-1-yl)-4-oxo-4H-chromene-2-carboxylic acid hydrochloride (prepn. given) in DMF/Et3N was treated sequentially with 1-hydroxybenzotriazole, O-(1H-benzotriazol-1-yl)-N,N,N',N'-pentamethyleneuronium tetrafluoroborate, 4-dimethylaminopyridine, and 4-(4-morpholinyl)aniline (prepn. given) to give 8-(4-methyl-1-piperazinyl)-N-[4-(4-morpholinyl)phenyl]-4-oxo-4H-

chromene-2-carboxamide. Several I showed 5-HT1B antagonist activity in the range 0.006-5.5 mg/kg in a screen for reversal of hypothermia in guinea pigs.

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539471 CAPLUS
DN 137:109205
TI Preparation of 4-oxo-4H-chromene-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055012	A2	20020718	WO 2002-SE68	20020115
	WO 2002055012	A3	20021114		
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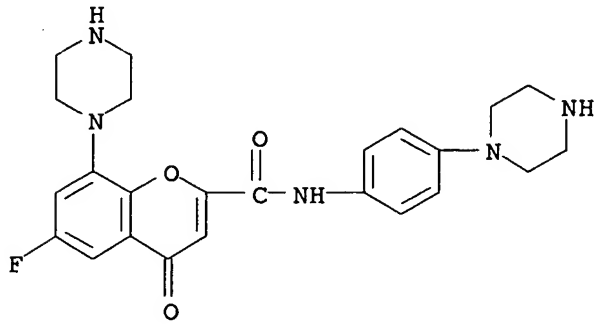
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2001-262107PP	20010116
				SE 2001-3650 A	20011101
	EP 1353913	A2	20031022	EP 2002-729622	20020115
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				US 2001-262107PP	20010116
				SE 2001-3650 A	20011101
				WO 2002-SE68 W	20020115
	US 2003013708	A1	20030116	US 2002-51776	20020116
				US 2001-262107PP	20010116
				SE 2001-3650 A	20011101
				WO 2002-SE68 W	20020115
	NO 2003003203	A	20030902	NO 2003-3203	20030715
				US 2001-262107PP	20010116
				SE 2001-3650 A	20011101
				WO 2002-SE68 W	20020115

OS MARPAT 137:109205
IT **442914-98-9P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of 4-oxo-4H-chromene-2-carboxamides and related compds. as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors)
RN 442914-98-9 CAPLUS
CN 4H-1-Benzopyran-2-carboxamide, 6-fluoro-4-oxo-8-(1-piperazinyl)-N-[4-(1-

piperazinyl)phenyl]-, hydrochloride (9CI) (CA INDEX NAME)



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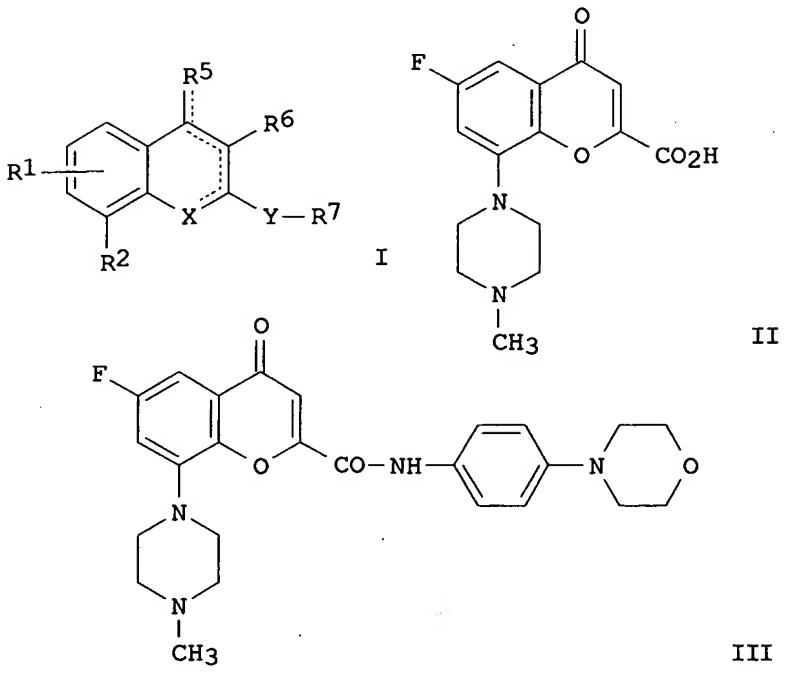

I II III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted

heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-chromene-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-chromene-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

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L7 3 S L5

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L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN **138:368764**
TI Preparation of 4-oxo-4H-chromene-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

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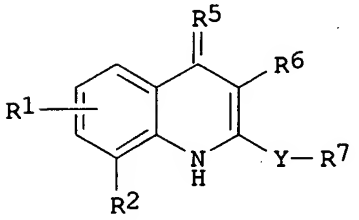
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

OS MARPAT 138:368764

GI



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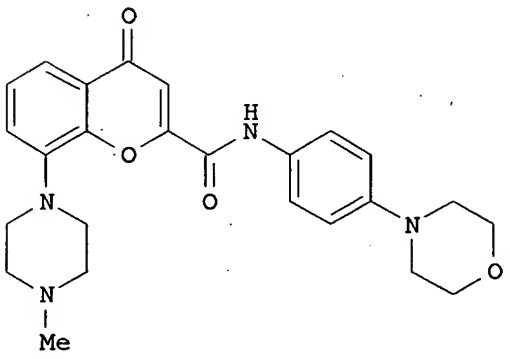

II

AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-chromene-2-carboxylate (24%).

Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539472 CAPLUS
DN **137:93772**
TI Preparation of piperazinylchromenones as 5-HT1B 5-HT1D agonists/antagonists useful as drugs.
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055013	A2	20020718	WO 2002-SE69	20020115
	WO 2002055013	A3	20021114		
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				US 2001-262109PP	20010116
				SE 2001-3647 A	20011101
	EP 1353914	A2	20031022	EP 2002-729623	20020115
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
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	NO 2003003204	A	20030902	NO 2003-3204	20030715
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OS MARPAT 137:93772
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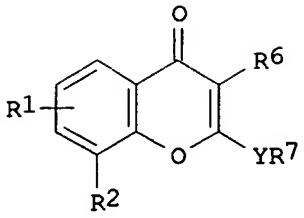

I

AB Title compds. [I; R1 = H, thiomethoxy, NHA, NA2, NHCOA, halo, OH, OA, cyano, aryl, (substituted) alkyl, cycloalkyl, etc.; A = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R2 = (substituted) piperazinyl, homopiperazinyl, aminoalkylamino, aminoheterocyclyl, heterocyclylamino; R6 = H, Me; Y = CONH, CONA, CSNH, CH2CO, CH2NA, piperazinylcarbonyl, 5-membered heterocyclylene, etc.; R7 = (substituted) mono- or bicyclic aryl, heterocyclyl], were prepd. Thus, 8-(4-methyl-1-piperazin-1-yl)-4-oxo-4H-chromene-2-carboxylic acid hydrochloride (prepn. given) in DMF/Et3N was treated sequentially with 1-hydroxybenzotriazole, O-(1H-benzotriazol-1-yl)-N,N,N',N'-pentamethyleneuronium tetrafluoroborate, 4-dimethylaminopyridine, and 4-(4-morpholinyl)aniline (prepn. given) to give 8-(4-methyl-1-piperazinyl)-N-[4-(4-morpholinyl)phenyl]-4-oxo-4H-chromene-2-carboxamide. Several I showed 5-HT1B antagonist activity in the range 0.006-5.5 mg/kg in a screen for reversal of hypothermia in guinea pigs.

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539471 CAPLUS
DN **137:109205**
TI Preparation of 4-oxo-4H-chromene-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055012	A2	20020718	WO 2002-SE68	20020115
	WO 2002055012	A3	20021114		

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			US 2001-262107PP	20010116
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			WO 2002-SE68	W 20020115
NO 2003003203	A	20030902	NO 2003-3203	20030715
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OS MARPAT 137:109205

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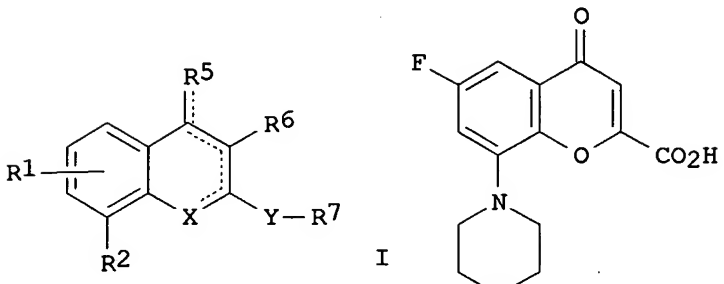
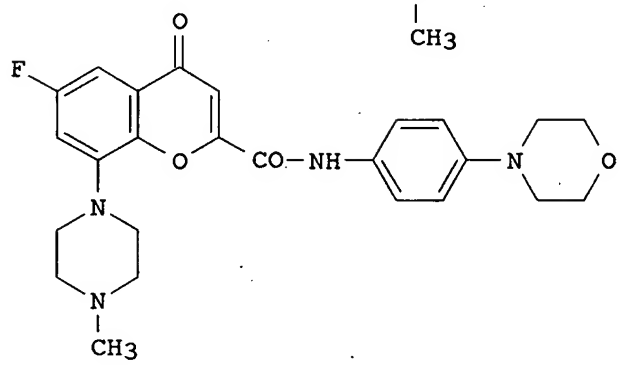


I

II



III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-chromene-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and

2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-chromene-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

```
=> s chromene and diazepan
L8            3 CHROMENE AND DIAZEPAN

=> s chromene and thiomorpholine
L9            6 CHROMENE AND THIOMORPHOLINE

=> s l8 and l9
L10           3 L8 AND L9

=> s chromene and pierazine
L11           0 CHROMENE AND PIERAZINE

=> s chromene and piperazine
L12          10 CHROMENE AND PIPERAZINE

=> s l10 and l12
L13           3 L10 AND L12

=> d his

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                S L1

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L3             4 S L1 SSS FULL

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L7             3 S L5
L8             3 S CHROMENE AND DIAZEPAN
L9             6 S CHROMENE AND THIOMORPHOLINE
L10            3 S L8 AND L9
L11            0 S CHROMENE AND PIERAZINE
L12           10 S CHROMENE AND PIPERAZINE
L13            3 S L10 AND L12
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L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356424 CAPLUS
DN 138:368765
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037872	A1	20030508	WO 2002-SE1989	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3649 A 20011101

OS MARPAT 138:368765
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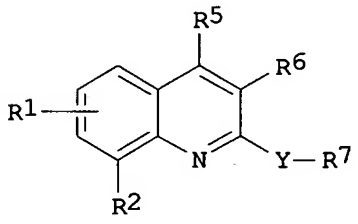

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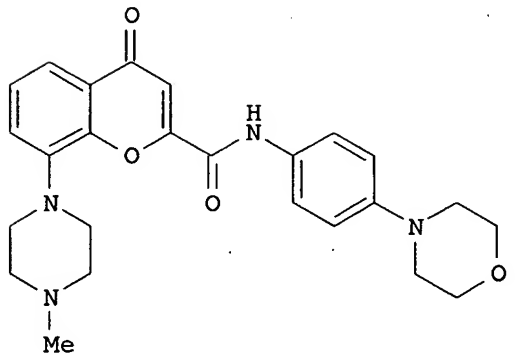

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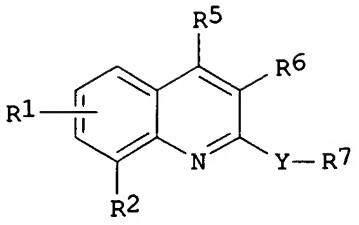

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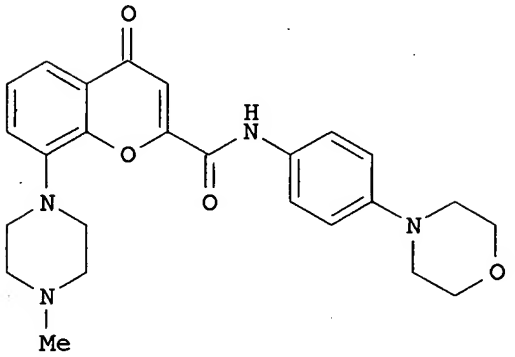

II

AB Quinolines I [wherein R1 = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as 5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene**-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN 138:368764
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

OS MARPAT 138:368764
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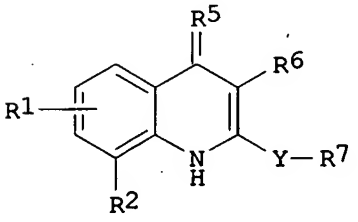

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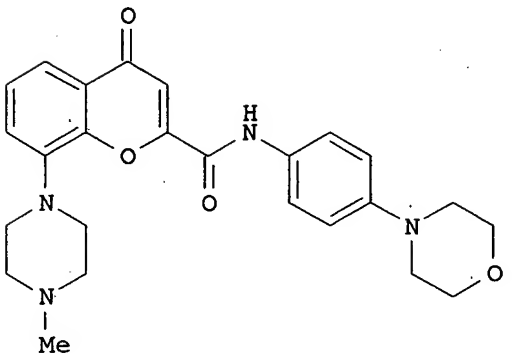

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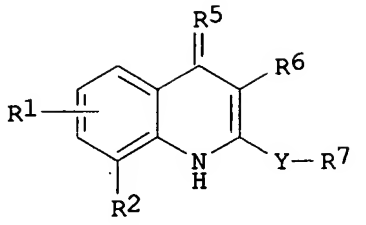

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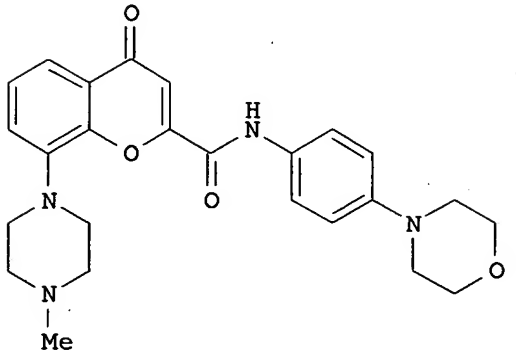

II

AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene** -2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539471 CAPLUS
DN 137:109205
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055012	A2	20020718	WO 2002-SE68	20020115
WO 2002055012	A3	20021114		
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			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
EP 1353913	A2	20031022	EP 2002-729622	20020115
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			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115
US 2003013708	A1	20030116	US 2002-51776	20020116
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115
NO 2003003203	A	20030902	NO 2003-3203	20030715
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			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115

OS MARPAT 137:109205
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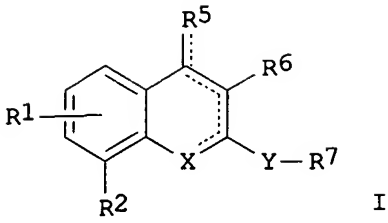

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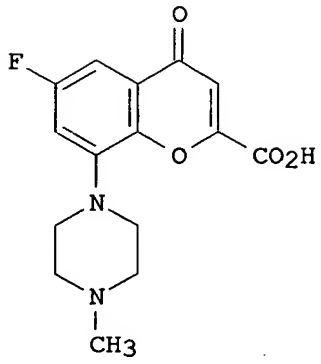

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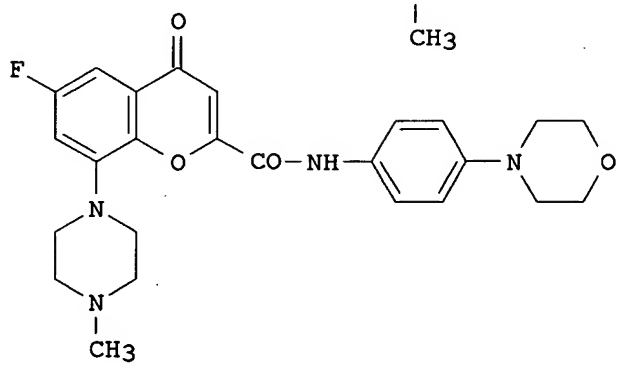

III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-**chromene**-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-**chromene**-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

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L9 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356424 CAPLUS
DN 138:368765
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037872	A1	20030508	WO 2002-SE1989	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

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SE 2001-3649 A 20011101

OS MARPAT 138:368765
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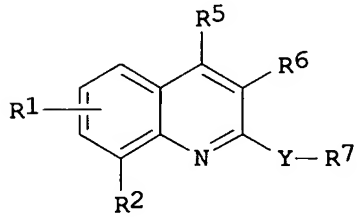

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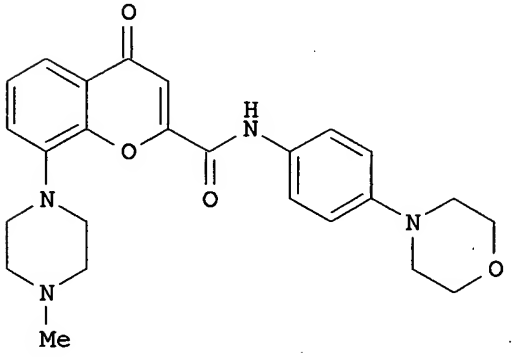

II

AB Quinolines I [wherein R1 = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y =

CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as 5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene**-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN 138:368764
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

OS MARPAT 138:368764
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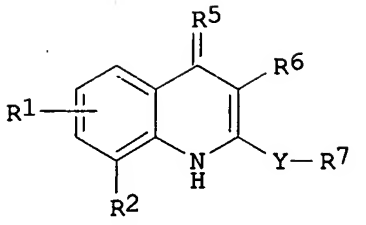

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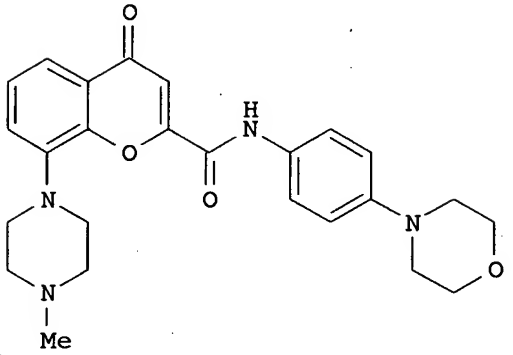


II

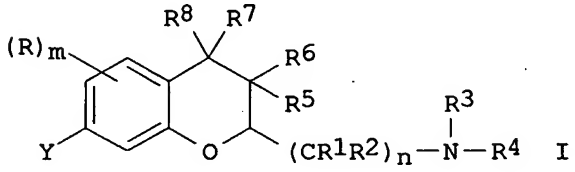
AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene** -2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:282556 CAPLUS
DN 138:304161
TI Preparation of 2-(aminoalkyl)chromans as 5-hydroxytryptamine-6 ligands for treatment of CNS disorders
IN Greenblatt, Lynne Padilla; Kelly, Michael Gerard
PA Wyeth, John, and Brother Ltd., USA
SO PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003029238	A1	20030410	WO 2002-US30955	20020930
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			US 2001-326957PP	20011004
US 2003158175	A1	20030821	US 2002-263890	20021002
			US 2001-326957PP	20011004

OS MARPAT 138:304161
GI



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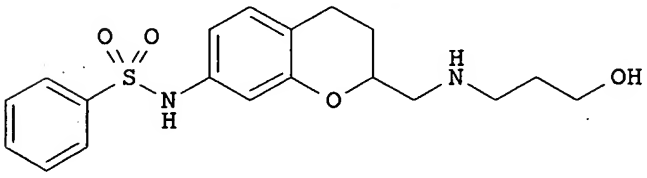


II

AB Title compds. I [wherein Y = SO2NR9R10 or NR11ZR12; Z = SO2, CONH, or CSNH; R = halo, CN, OR13, CO2R14, CONR15R16, SOxR17, or (un)substituted alkyl, alkenyl, alkynyl, cyclo(hetero)aryl, Ph, or heteroaryl; R1, R2, R5, R6, R7, R8, and R11 = independently H or (un)substituted alkyl; R3 and R4 = independently H or (un)substituted alkyl or (hetero)cycloalkyl; or NR3R4

= (un)substituted heterocyclyl; m = 0-3; n = 1-4; x = 0-2; R9 and R10 = independently H or (un)substituted alkyl or (hetero)aryl; R12 and R17 = independently (un)substituted alkyl or (hetero)aryl; R13 = H, CO2R18, or (un)substituted alkyl, alkenyl, alkynyl, or (hetero)aryl; R14 and R18 = independently H or (un)substituted alkyl, alkenyl, alkynyl, cyclo(hetero)alkyl, or (hetero)aryl; R15 and R16 = independently H or (un)substituted alkyl; or stereoisomers or pharmaceutically acceptable salts thereof] were prepd. as 5-hydroxytryptamine-6 (5-HT6) ligands. For example, cycloaddn. of N-(4-acetyl-3-hydroxyphenyl)acetamide with di-Et oxalate in the presence of NaOEt in EtOH provided Et 7-amino-4-oxo-4H-**chromene**-2-carboxylate (61%). Hydrogenation of the chroman (89%) with Pd/C, followed by redn. of the ester using LiBH4 gave 7-amino-2-(hydroxymethyl)chroman (90%). Addn. of PhSO2Cl in pyridine afforded the N,O-disubstituted deriv. (92%). Reaction with 3-amino-1-propanol in pyridine and conversion to the salt provided II.bul.hemifumarate. The latter exhibited binding to the 5-HT6 receptor with Ki of 5 nM in cultured HeLa cells expressing human cloned 5-HT6 receptors. Thus, I are useful for the treatment of CNS disorders, such as motor disorder, anxiety, cognitive disorder, schizophrenia, depression, Alzheimer's disease, Parkinson's disease, and attention deficit disorder (no data).

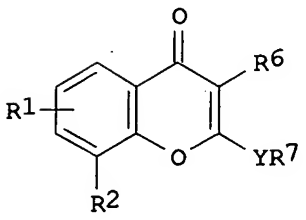
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539472 CAPLUS
DN 137:93772
TI Preparation of piperazinylchromenones as 5-HT1B 5-HT1D agonists/antagonists useful as drugs.
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055013	A2	20020718	WO 2002-SE69	20020115
	WO 2002055013	A3	20021114		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2001-262109PP	20010116
				SE 2001-3647 A	20011101
	EP 1353914	A2	20031022	EP 2002-729623	20020115
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				US 2001-262109PP	20010116

			SE 2001-3647	A 20011101
			WO 2002-SE69	W 20020115
NO 2003003204	A	20030902	NO 2003-3204	20030715
			US 2001-262109PP	20010116
			SE 2001-3647	A 20011101
			WO 2002-SE69	W 20020115

OS MARPAT 137:93772
GI



I

AB Title compds. [I; R1 = H, thiomethoxy, NHA, NA2, NHCOA, halo, OH, OA, cyano, aryl, (substituted) alkyl, cycloalkyl, etc.; A = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R2 = (substituted) piperazinyl, homopiperazinyl, aminoalkylamino, aminoheterocyclyl, heterocyclylamino; R6 = H, Me; Y = CONH, CONA, CSNH, CH2CO, CH2NA, piperazinylcarbonyl, 5-membered heterocyclylene, etc.; R7 = (substituted) mono- or bicyclic aryl, heterocyclyl], were prepd. Thus, 8-(4-methyl-1-piperazin-1-yl)-4-oxo-4H-**chromene**-2-carboxylic acid hydrochloride (prepn. given) in DMF/Et3N was treated sequentially with 1-hydroxybenzotriazole, O-(1H-benzotriazol-1-yl)-N,N,N',N'-pentamethyleneuronium tetrafluoroborate, 4-dimethylaminopyridine, and 4-(4-morpholinyl)aniline (prepn. given) to give 8-(4-methyl-1-piperazinyl)-N-[4-(4-morpholinyl)phenyl]-4-oxo-4H-**chromene**-2-carboxamide. Several I showed 5-HT1B antagonist activity in the range 0.006-5.5 mg/kg in a screen for reversal of hypothermia in guinea pigs.

L9 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539471 CAPLUS
DN 137:109205
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055012	A2	20020718	WO 2002-SE68	20020115
WO 2002055012	A3	20021114		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2001-262107PP 20010116
SE 2001-3650 A 20011101

EP 1353913 A2 20031022 EP 2002-729622 20020115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2001-262107PP 20010116
SE 2001-3650 A 20011101
WO 2002-SE68 W 20020115

US 2003013708 A1 20030116 US 2002-51776 20020116
US 2001-262107PP 20010116
SE 2001-3650 A 20011101
WO 2002-SE68 W 20020115

NO 2003003203 A 20030902 NO 2003-3203 20030715
US 2001-262107PP 20010116
SE 2001-3650 A 20011101
WO 2002-SE68 W 20020115

OS MARPAT 137:109205
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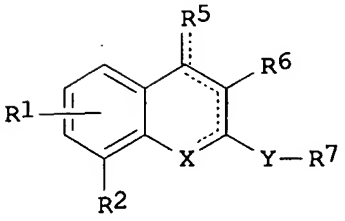

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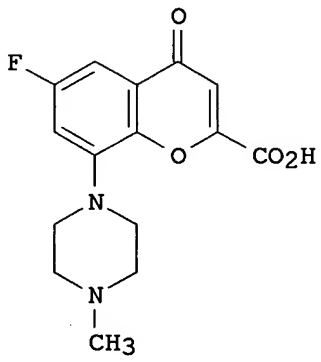

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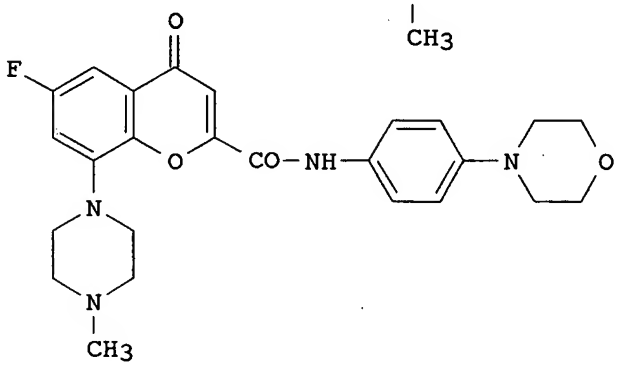

III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H,

alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-**chromene**-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-**chromene**-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

L9 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:72049 CAPLUS
DN 136:134784
TI Preparation of hydrocarbyl sulfone derivatives as inhibitors of activated blood coagulation factor X and process for their production
IN Kubo, Keiji; Miyawaki, Toshio; Kawamura, Masaki
PA Takeda Chemical Industries, Ltd., Japan
SO PCT Int. Appl., 252 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002006234	A1	20020124	WO 2001-JP6148	20010717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			JP 2000-221065 A	20000717
AU 2001069531	A5	20020130	AU 2001-69531	20010717
			JP 2000-221065 A	20000717
			WO 2001-JP6148 W	20010717
JP 2002201178	A2	20020716	JP 2001-216830	20010717
			JP 2000-221065 A	20000717
EP 1302462	A1	20030416	EP 2001-948032	20010717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			JP 2000-221065 A	20000717
			WO 2001-JP6148 W	20010717
US 2003187023	A1	20031002	US 2003-333308	20030116
			JP 2000-221065 A	20000717
			WO 2001-JP6148 W	20010717

OS MARPAT 136:134784

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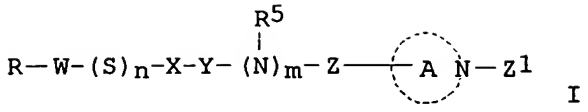

I

AB Compds. represented by the general formula (I) or salts thereof [wherein R = (un)substituted cyclic hydrocarbyl or heterocyclyl; W = a bond, (un)substituted divalent hydrocarbon chain; X = (un)substituted divalent hydrocarbon group; Y, Z = NR6, CO, SO, SO2, CH2, NR6CO, COCH2, a bond; ring A = (un)substituted N-contg. heterocyclyl; R5, R6 = H, (un)substituted hydrocarbyl, (un)substituted alkoxy, optionally esterified or amidated carboxyl, (un)substituted acyl; or R5 is linked to the substituent of X or that of the ring A to form a ring; Z1 = (un)substituted imidoyl or N-contg. heterocyclyl; n = 0,1,2; m = 0,1] or salts thereof, which inhibit activated blood coagulation factor X (no data), are prepd. These compds. are useful as anticoagulants for the treatment or prevention of myocardial infarction, cerebral thrombosis, deep venous thrombosis, pulmonary thromboembolism, or thromboembolism during or after surgery. Thus, a soln. of 3-[(6-chloro-2-naphthyl)sulfonyl]propanoic acid (prepn. given), 4-methylamino-1-(2-methyl-4-pyridyl)piperidine (prepn. given), DMTMM in THF was stirred at room temp. for 16 h to give 38% 3-[(6-chloro-2-naphthyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide (II). A capsule and tablet formulation contg. II were prepd.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l10 fbib hitstr abs total

L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356424 CAPLUS
DN 138:368765
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037872	A1	20030508	WO 2002-SE1989	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3649 A 20011101

OS MARPAT 138:368765

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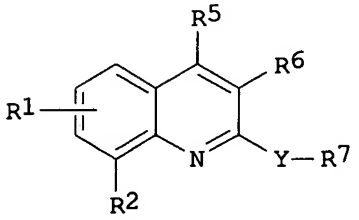

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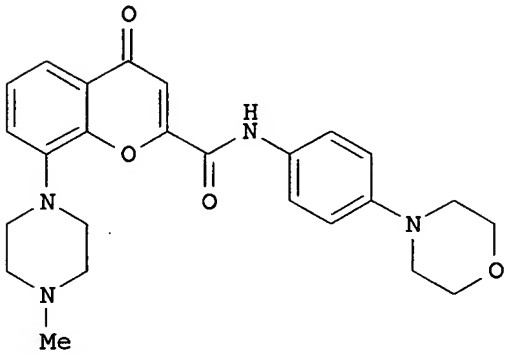


II

AB Quinolines I [wherein R1 = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as 5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene**-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds.

showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN 138:368764
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

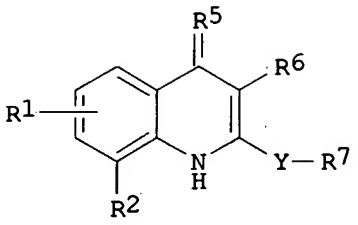
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

OS MARPAT 138:368764
GI



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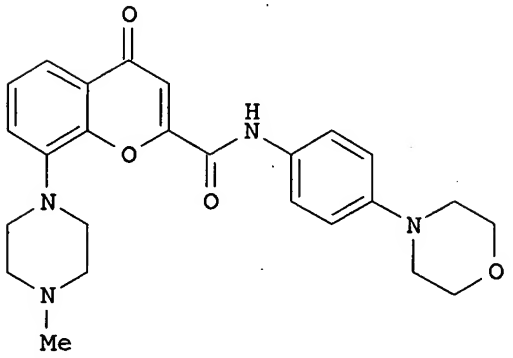

II

AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene** -2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539471 CAPLUS
DN 137:109205
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055012	A2	20020718	WO 2002-SE68	20020115
WO 2002055012	A3	20021114		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
EP 1353913	A2	20031022	EP 2002-729622	20020115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115
US 2003013708	A1	20030116	US 2002-51776	20020116
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115
NO 2003003203	A	20030902	NO 2003-3203	20030715
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115

OS MARPAT 137:109205
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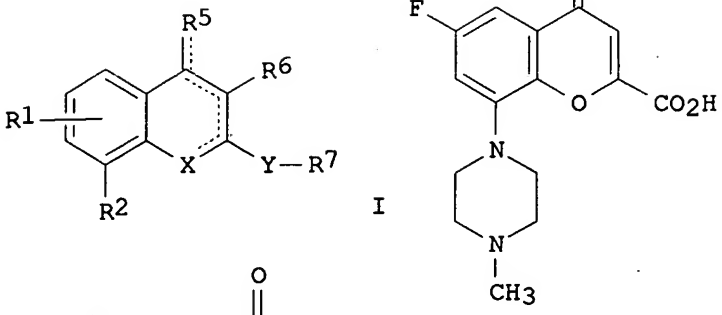

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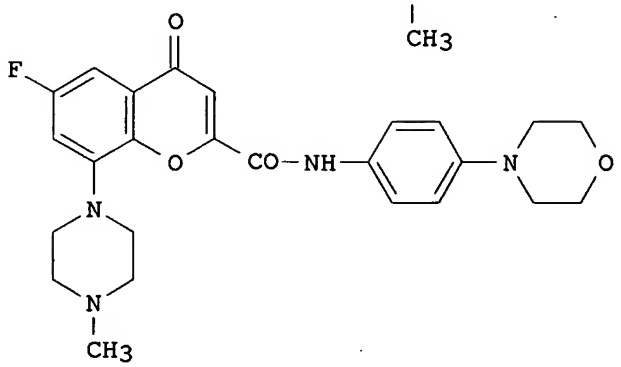

III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-**chromene**-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-**chromene**-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

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L12 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356424 CAPLUS
DN 138:368765
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037872	A1	20030508	WO 2002-SE1989	20021101

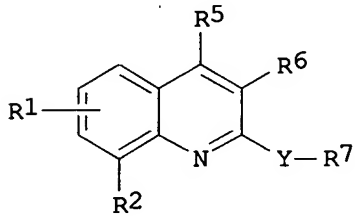
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3649 A 20011101

OS MARPAT 138:368765

GI



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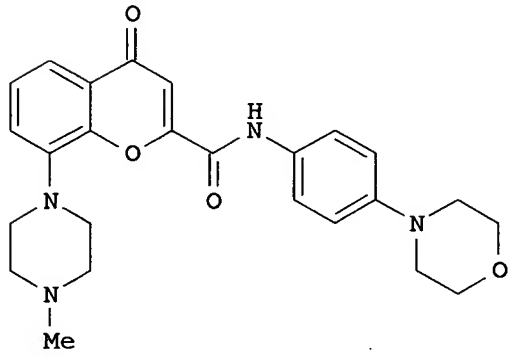


II

AB Quinolines I [wherein R1 = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y =

CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as 5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene**-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN 138:368764
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

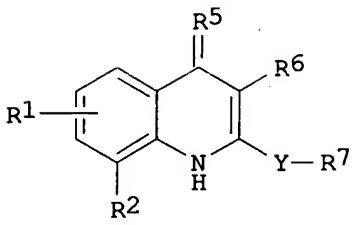
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

OS MARPAT 138:368764
GI



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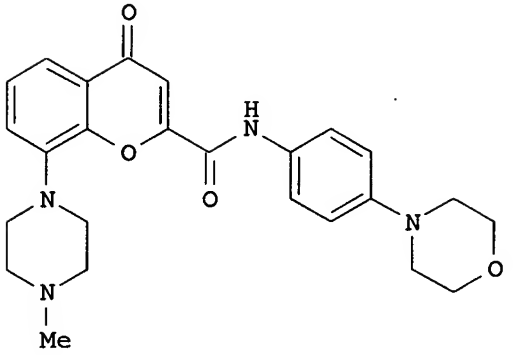

II

AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene** -2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:888554 CAPLUS
DN 137:384751
TI 7,8-Fused 4(H)-**chromenes** as activators of caspases and inducers of apoptosis
IN Cai, Sui Xiong; Xu, Lifen; Storer, Richard; Attardo, Giorgio
PA Cytovia, Inc., USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002092083	A1	20021121	WO 2002-US15398	20020516

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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US 2001-290976PP 20010516

OS MARPAT 137:384751
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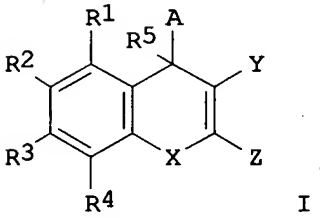


I

AB Title compds. I [X = O, S, (un)substituted NH; Y = CN, (un)substituted CHO, CO2H, CONH2; Z = (un)substituted NH2; R1, R2 = H, halo, haloalkyl, aryl, carbocyclic, heterocyclic, heteroaryl, (un)substituted alkyl, alkenyl, alkynyl, NH2, NO2, CN, OH, SH, acyloxy, N3, alkoxy, CO2H, OCH2O, carbamoyl, alkylthio; R3R4 = atoms required to complete a thiazole, oxazole, 2-iminoimidazole, 2-oxo-2,1,3-thiadiazole, 2-oxothiazole, 2-oxooxazole, 2-thioxooxazole, 2-thioxoimidazole, 2-thioxothazole, imidazoline, oxazoline, thiazoline, triazole, oxazine, 2,3-dioxooxazine, or **piperazine** ring; R5 = H, alkyl; A = (un)substituted aryl, heteroaryl, carbocyclic, heterocyclic, aralkyl] were prepd. for use as activators of caspases and inducers of apoptosis. Therefore, they can be used to induce cell death in a variety of clin. conditions in which

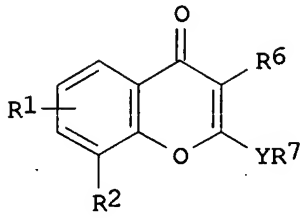
uncontrolled growth and spread of abnormal cells occurs. Thus, 2-amino-3-cyano-4-(3-bromo-4,5-dimethoxyphenyl)-7-hydroxy-8-amino-4H-**chromene** was treated with carbonyldiimidazole to give I [X = O, Y = CN, Z = NH2, A = 3,4,5-Br(MeO)2C6H2, R1, R2, R5 = H, R3R4 = OC(O)NH] which had EC50 against T-47D and ZR-75-1 cell lines of 566.6 and 365.6 nM resp.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539472 CAPLUS
DN 137:93772
TI Preparation of piperazinylchromenones as 5-HT1B 5-HT1D agonists/antagonists useful as drugs.
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055013	A2	20020718	WO 2002-SE69	20020115
	WO 2002055013	A3	20021114		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2001-262109PP	20010116
				SE 2001-3647 A	20011101
	EP 1353914	A2	20031022	EP 2002-729623	20020115
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				US 2001-262109PP	20010116
				SE 2001-3647 A	20011101
				WO 2002-SE69 W	20020115
	NO 2003003204	A	20030902	NO 2003-3204	20030715
				US 2001-262109PP	20010116
				SE 2001-3647 A	20011101
				WO 2002-SE69 W	20020115

OS MARPAT 137:93772
GI



I

AB Title compds. [I; R1 = H, thiomethoxy, NHA, NA2, NHCOA, halo, OH, OA, cyano, aryl, (substituted) alkyl, cycloalkyl, etc.; A = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R2 = (substituted) piperazinyl, homopiperazinyl, aminoalkylamino, aminoheterocyclyl, heterocyclylamino; R6 = H, Me; Y = CONH, CONA, CSNH, CH2CO, CH2NA, piperazinylcarbonyl, 5-membered heterocyclylene, etc.; R7 = (substituted) mono- or bicyclic aryl, heterocyclyl], were prepd. Thus, 8-(4-methyl-1-piperazin-1-yl)-4-oxo-4H-**chromene**-2-carboxylic acid hydrochloride (prepn. given) in DMF/Et3N was treated sequentially with 1-hydroxybenzotriazole, O-(1H-benzotriazol-1-yl)-N,N,N',N'-pentamethyleneuronium tetrafluoroborate, 4-dimethylaminopyridine, and 4-(4-morpholinyl)aniline (prepn. given) to give 8-(4-methyl-1-piperazinyl)-N-[4-(4-morpholinyl)phenyl]-4-oxo-4H-**chromene**-2-carboxamide. Several I showed 5-HT1B antagonist activity in the range 0.006-5.5 mg/kg in a screen for reversal of hypothermia in guinea pigs.

L12 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:539471 CAPLUS
DN 137:109205
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca Ab, Swed.
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055012	A2	20020718	WO 2002-SE68	20020115
	WO 2002055012	A3	20021114		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2001-262107PP 20010116
SE 2001-3650 A 20011101

EP 1353913	A2	20031022	EP 2002-729622	20020115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115
US 2003013708	A1	20030116	US 2002-51776	20020116
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115
NO 2003003203	A	20030902	NO 2003-3203	20030715
			US 2001-262107PP	20010116
			SE 2001-3650 A	20011101
			WO 2002-SE68 W	20020115

OS MARPAT 137:109205

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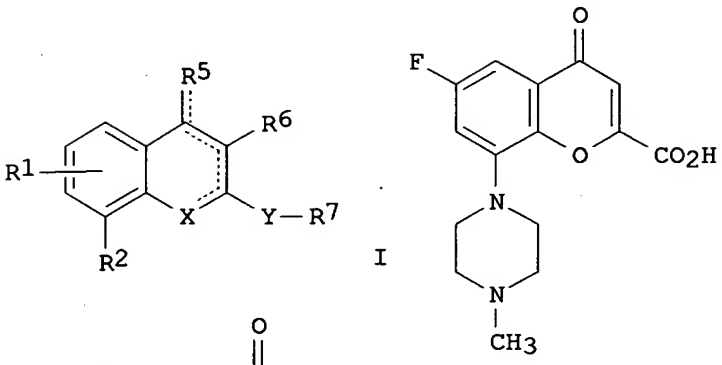
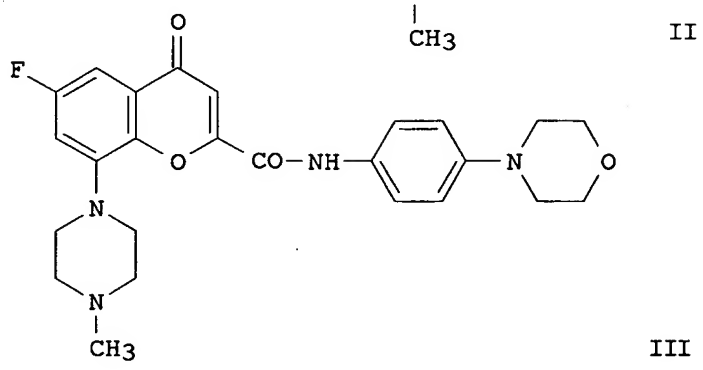


I

II



III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-**chromene** -2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine

provided preferred 4-oxo-4H-**chromene**-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

L12 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:314042 CAPLUS
DN 137:78925
TI Design, synthesis and biological activity study on N-[4-(substituted phenyl)**piperazine**-1-yl]alkyl amide series as .alpha.1-adrenoceptor antagonists
AU Fang, Hao; Xia, Lin; Jiang, Zhen-Zhou; Zhang, Wei; Zhang, Lu-Yong
CS Department of Medicinal Chemistry, China Pharmaceutical University, Nanjing, 210009, Peop. Rep. China
SO Huaxue Xuebao (2002), 60(4), 725-731
CODEN: HHHPA4; ISSN: 0567-7351
PB Kexue Chubanshe
DT Journal
LA Chinese
OS CASREACT 137:78925
AB Novel furan-2-carboxylic acid {.omega.-[4-(substituted phenyl)-**piperazine**-1-yl]alkyl}amide and 2-oxo-2H-**chromene**-3-carboxylic acid {.omega.-[4-(substituted phenyl)**piperazine**-1-yl]alkyl}amide derivs. have been designed and synthesized based on the structure and activity relationship (SAR) of phenylpiperazine series as .alpha.1-adrenoceptor (.alpha.1-AR) antagonists and the results of computer-aided drug design we studied before. All the target compds. have been identified by 1H NMR, IR and MS (HRMS). Preliminary bioassay suggests that most of the target compds. display good blocking activity to .alpha.1-AR. The potency (pA2) of compd. N-{2-[4-(2-methoxyphenyl)piperazin-1-yl]ethyl}-2-furancarboxamide is higher than prazosin.

L12 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:72049 CAPLUS
DN 136:134784
TI Preparation of hydrocarbyl sulfone derivatives as inhibitors of activated blood coagulation factor X and process for their production
IN Kubo, Keiji; Miyawaki, Toshio; Kawamura, Masaki
PA Takeda Chemical Industries, Ltd., Japan
SO PCT Int. Appl., 252 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002006234	A1	20020124	WO 2001-JP6148	20010717

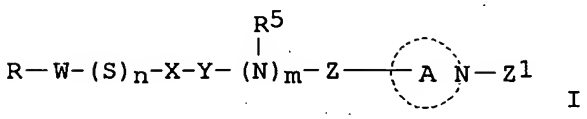
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

			JP 2000-221065 A	20000717
AU 2001069531	A5	20020130	AU 2001-69531	20010717
			JP 2000-221065 A	20000717
			WO 2001-JP6148 W	20010717
JP 2002201178	A2	20020716	JP 2001-216830	20010717
			JP 2000-221065 A	20000717
EP 1302462	A1	20030416	EP 2001-948032	20010717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			JP 2000-221065 A	20000717
			WO 2001-JP6148 W	20010717
US 2003187023	A1	20031002	US 2003-333308	20030116
			JP 2000-221065 A	20000717
			WO 2001-JP6148 W	20010717

OS MARPAT 136:134784

GI



I

AB Compds. represented by the general formula (I) or salts thereof [wherein R = (un)substituted cyclic hydrocarbyl or heterocyclyl; W = a bond, (un)substituted divalent hydrocarbon chain; X = (un)substituted divalent hydrocarbon group; Y, Z = NR6, CO, SO, SO2, CH2, NR6CO, COCH2, a bond; ring A = (un)substituted N-contg. heterocyclyl; R5, R6 = H, (un)substituted hydrocarbyl, (un)substituted alkoxy, optionally esterified or amidated carboxyl, (un)substituted acyl; or R5 is linked to the substituent of X or that of the ring A to form a ring; Z1 = (un)substituted imidoyl or N-contg. heterocyclyl; n = 0,1,2; m = 0,1] or salts thereof, which inhibit activated blood coagulation factor X (no data), are prepd. These compds. are useful as anticoagulants for the treatment or prevention of myocardial infarction, cerebral thrombosis, deep venous thrombosis, pulmonary thromboembolism, or thromboembolism during or after surgery. Thus, a soln. of 3-[(6-chloro-2-naphthyl)sulfonyl]propanoic acid (prepn. given), 4-methylamino-1-(2-methyl-4-pyridyl)piperidine (prepn. given), DMTMM in THF was stirred at room temp. for 16 h to give 38% 3-[(6-chloro-2-naphthyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide (II). A capsule and tablet formulation contg. II were prepd.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:842112 CAPLUS
DN 134:17502
TI Preparation of phenoxypropylamine compounds as antagonists of 5-HT1A receptor
IN Nishiyama, Akira; Bougauchi, Masahiro; Kuroita, Takanobu; Minoguchi, Masanori; Morio, Yasunori; Kanzaki, Kouji

PA Welfide Corp., Japan
SO PCT Int. Appl., 335 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000071517	A1	20001130	WO 2000-JP3279	20000522
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				JP 1999-142750 A	19990524
				JP 1999-166160 A	19990614
				JP 1999-277384 A	19990929
				JP 2000-18080 A	20000125
	BR 2000011542	A	20020305	BR 2000-11542	20000522
				JP 1999-142750 A	19990524
				JP 1999-166160 A	19990614
				JP 1999-277384 A	19990929
				JP 2000-18080 A	20000125
				WO 2000-JP3279 W	20000522
	EP 1188747	A1	20020320	EP 2000-927844	20000522
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
				JP 1999-142750 A	19990524
				JP 1999-166160 A	19990614
				JP 1999-277384 A	19990929
				JP 2000-18080 A	20000125
				WO 2000-JP3279 W	20000522
	NZ 516111	A	20030530	NZ 2000-516111	20000522
				JP 1999-142750 A	19990524
				JP 1999-166160 A	19990614
				JP 1999-277384 A	19990929
				JP 2000-18080 A	20000125
				WO 2000-JP3279 W	20000522
	US 2002111358	A1	20020815	US 2001-990389	20011123
				JP 1999-142750 A	19990524
				JP 1999-166160 A	19990614
				JP 1999-277384 A	19990929
				JP 2000-18080 A	20000125
				WO 2000-JP3279 A2	20000522
	ZA 2001010137	A	20030225	ZA 2001-10137	20011210
				JP 1999-142750 A	19990524

OS MARPAT 134:17502
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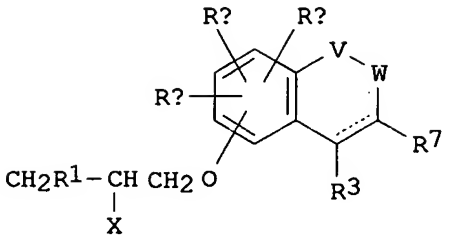

I

AB Phenoxypropylamine compds. represented by general formula [I; a bond represented by a solid and a dotted line is a double or single bond; X = H, HO, C1-8 alkoxy, acyloxy, oxo; R1 = 4-substituted piperidino, piperazino, 1-piperidinylamino, or 1,2,3,6-tetrahydropyrazinyl, (un)substituted aryloxy- or arylthioamino, (un)substituted heterocyclyloxy- or heterocyclylthioamino, etc.; R3 = H, C1-18 alkyl, halo; Ra, Rb, Rc = H, C1-18 alkyl, OH, C1-8 alkoxy, halo, acyl, NO2, NH2], optically active isomers thereof or pharmaceutically acceptable salts thereof and hydrates of the same are prepd. These compds. have an affinity selectively for 5-HT1A receptor, simultaneously show an antagonistic activity, and inhibit the reuptake of 5-HT, thereby being usable as antidepressant agents quickly achieving an antidepressant effect (no data). Thus, 4-(3,4-dichlorophenyl)**piperazine** was added to a soln. of (S)-5-(4-glycidyloxybenzo[b]furan-2-yl)-3-methylisoxazole in MeOH and refluxed for 8 h to give (S)-1-(4-(3,4-dichlorophenyl)piperazin-1-yl)-3-(2-(3-methylisoxazol-5-yl)benzo[b]furan-4-yloxy)-2-propanol.

RE.CNT 151 THERE ARE 151 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:236987 CAPLUS
DN 130:282085
TI Piperazino- and piperidino-substituted indanol derivatives, process for their preparation, and pharmaceutical compositions containing them as CNS agents (5-HT1A ligands) or analgesics
IN Peglion, Jean-Louis; Goument, Bertrand; Millan, Mark; Newman-Tancredi, Adrian; Dekeyne, Anne
PA Adir et Compagnie, Fr.
SO Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 906912	A1	19990407	EP 1998-402415	19981001
EP 906912	B1	20030108		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
			FR 1997-12336 A	19971003
FR 2769312	A1	19990409	FR 1997-12336	19971003
FR 2769312	B1	19991203		
CN 1218051	A	19990602	CN 1998-120594	19980930
CN 1122666	B	20031001		
			FR 1997-12336 A	19971003
CA 2249756	AA	19990403	CA 1998-2249756	19981001

AT 230739	E	20030115	FR 1997-12336 A 19971003 AT 1998-402415 19981001
PT 906912	T	20030430	FR 1997-12336 A 19971003 PT 1998-98402415 19981001
ES 2190574	T3	20030801	FR 1997-12336 A 19971003 ES 1998-402415 19981001
NO 9804620	A	19990406	FR 1997-12336 A 19971003 NO 1998-4620 19981002
ZA 9809011	A	19990412	FR 1997-12336 A 19971003 ZA 1998-9011 19981002
AU 9887875	A1	19990422	FR 1997-12336 A 19971003 AU 1998-87875 19981002
AU 736710	B2	20010802	
JP 11158179	A2	19990615	FR 1997-12336 A 19971003 JP 1998-280639 19981002
US 5958927	A	19990928	FR 1997-12336 A 19971003 US 1998-165844 19981002
NZ 332142	A	20000526	FR 1997-12336 A 19971003 NZ 1998-332142 19981002
BR 9804485	A	20000411	FR 1997-12336 A 19971003 BR 1998-4485 19981005
US 6060487	A	20000509	FR 1997-12336 A 19971003 US 1999-273889 19990322
			FR 1997-12336 A 19971003 US 1998-165844 A319981002

OS MARPAT 130:282085
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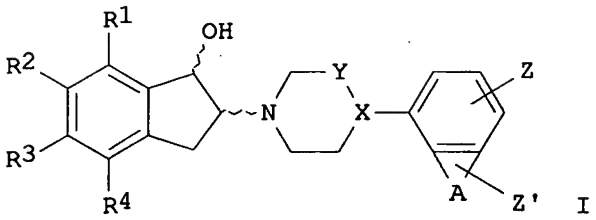

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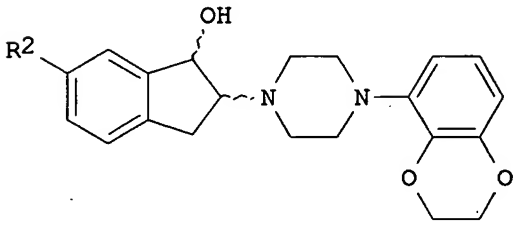

II

AB Title compds. I [R1-R4 = H, halo, alk(en/yn)yl, cycloalkylalkyl, CF3, CHO, CO2H, alkoxycarbonyl, alkanoyl, CH2OH, OH, alk(en/yn)yloxy, PhCH2O, cyano, (un)substituted amino, etc.; adjacent R1-R4 may form carbo- or heterocyclic rings; XY = NCH2, C:CH, CHCH2, or C(OH)CH2; A = atoms to form 5- to 7-membered heterocyclic ring contg. one or more double bonds and 1

or 2 atoms of O and/or S; Z = H, halo, OH, alkoxy; Z' = H, oxo, OH, alkoxy, or CH2OH], including cis or trans forms, racemic or optically active forms, and their pharmaceutically acceptable acid addn. salts, are claimed. The compds. are useful for treatment of anxiety, depression, psychosis, schizophrenia, cognitive disorders, stress, anorexia, and pain. Approx. 40 examples were prepd. For instance, 6-methoxyindan-1-one underwent bromination in the 2-position (97%), followed by coupling of the bromide with 1-(2,3-dihydro[1,4]benzodioxin-5-yl)**piperazine** (74%), and redn. of the keto group with NaBH4 in THF, to give cis- and trans-isomers of title compd. II [R2 = OMe]. In the rat ultrasonic vocalization test for anxiolytic activity, trans-II [R2 = H] reduced vocalization time from 230 s (control) to 8 s at 2.5 mg/kg s.c.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:767627 CAPLUS
DN 124:21803
TI Method and agents for preventing tissue injury from hypoxia
IN Bursten, Stuart L.; Singer, Jack W.; Rice, Glenn C.
PA CE Therapeutics, Inc., USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9513075	A1	19950518	WO 1994-US12821	19941114
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				US 1993-152117 A	19931112
	AU 9510907	A1	19950529	AU 1995-10907	19941114
				US 1993-152117 A	19931112
				WO 1994-US12821W	19941114
	EP 728003	A1	19960828	EP 1995-901808	19941114
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
				US 1993-152117 A	19931112
				WO 1994-US12821W	19941114

PATENT FAMILY INFORMATION:
FAN 2003:851281

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6638938	B1	20031028	US 1994-353756	19941212
				US 1993-152117 B2	19931112
	US 5856331	A	19990105	US 1997-948747	19971010
				US 1993-152117 B2	19931112
				US 1994-353756 A1	19941212
	US 2003216414	A1	20031120	US 2003-434097	20030509
				US 1993-152117 B2	19931112
				US 1994-353756 A3	19941212

OS MARPAT 124:21803
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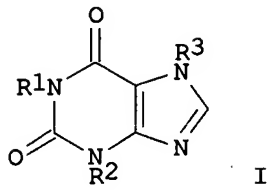

I

AB Tissue injury, caused by tissue hypoxia and reoxygenation, is prevented by administering a xanthine deriv. I [R1 = (.omega.-1) secondary alc.-substituted C5-12 alkyl enantiomer; R2, R3 = C1-12 alkyl or (di)oxaalkyl] or a (heterocyclylalkyl)amine that inhibits signal transduction by inhibiting cellular accumulation of linoleoyl phosphatidic acid through inhibition of lysophosphatidic acyltransferase. Diseases that can be treated with these compds. include shock, sequelae of myocardial infarction and stroke, altitude sickness, acidosis, hypoxia-mediated neurodegenerative diseases, and disorders related to transplantation and transplant rejection. Thus, in mice with exptl. hemorrhage, treatment with lisophylline (100 mg/kg i.v. after 1 h, then 100 mg/kg i.p. 8 times at 8-h intervals) largely normalized signs of hemorrhagic shock (neutrophil infiltration, interstitial edema, elevated plasma levels of interferon-.gamma. and tumor necrosis factor .alpha., elevated mRNA levels for interleukins 1.beta. and 6 in pulmonary mononuclear cells, etc.).

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L13 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356424 CAPLUS
DN 138:368765
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037872	A1	20030508	WO 2002-SE1989	20021101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

NE, SN, TD, TG

SE 2001-3649 A 20011101

OS MARPAT 138:368765

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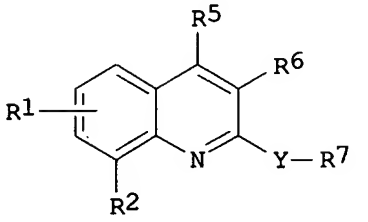

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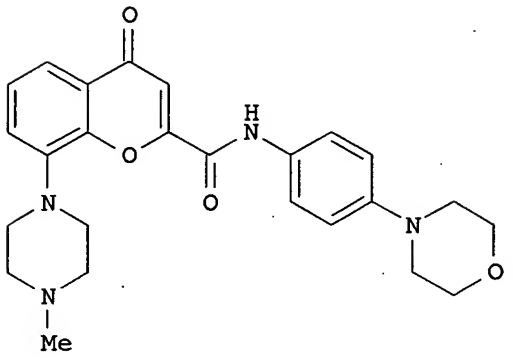

II

AB Quinolines I [wherein R1 = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as 5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene**-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. I are

useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:356423 CAPLUS
DN 138:368764
TI Preparation of 4-oxo-4H-**chromene**-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders
IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037871	A1	20030508	WO 2002-SE1987	20021101

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

SE 2001-3648 A 20011101

OS MARPAT 138:368764
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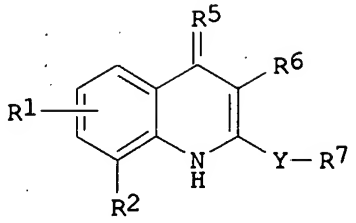

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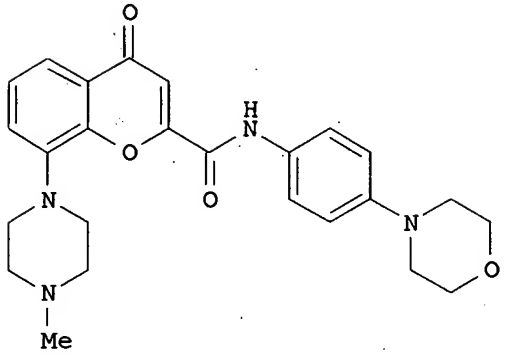
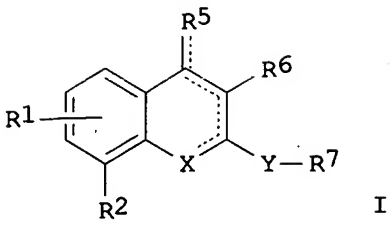


II

AB Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-**chromene** -2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT



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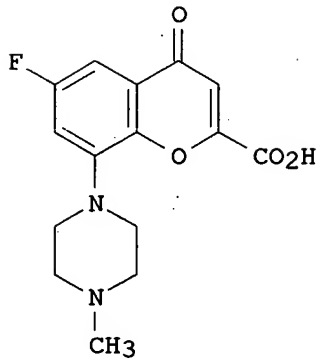
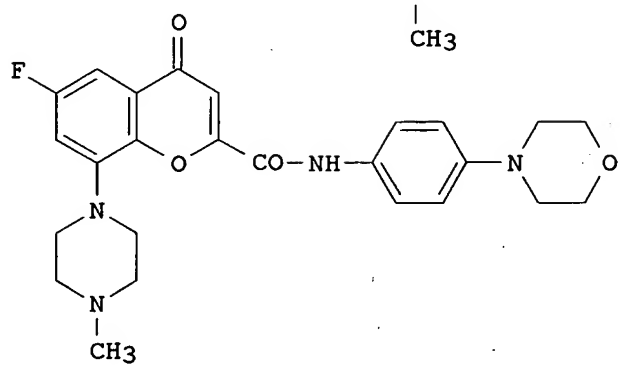


II



III

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one single bond. For example, condensation of 4-oxo-4H-**chromene**-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-**chromene**-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

=> s serotonine 5HT and chromene
L14 0 SEROTONINE 5HT AND CHROMENE

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	125.59	547.32
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-22.87	-22.87

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US 100517760IP1

Creation date: 02-19-2004
Indexing Officer: TNGUYEN64 - TUAN NGUYEN
Team: OIPEBackFileIndexing
Dossier: 10051776

Legal Date: 01-31-2004

No.	Doccode	Number of pages
1	SRNT	19

Total number of pages: 19

Remarks:

Order of re-scan issued on .....